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PRECUREMENT SECTION CURRENT SERIAL RECORDS

Coiton Fiber and Processing Test Results





Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE
Memphis, Tenn. 38122 October 24, 1975

COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1975

Discussion of Test Results

The average fiber length of short staple cottons tested from the Southwest is considerably longer and more uniform than a year ago according to the Cotton Division, Agricultural Marketing Service, USDA. Cottons are coarser and stronger at 1/8-inch gage strength tests. Picker and card waste is lower than a year ago. Yarns spun from these samples show stronger yarn skein strength and higher appearance grades. Yarn imperfections are fewer than a year ago. The average spinning potential yarn number is higher.

Medium staple samples tested from the South Central area are considerably longer and more uniform than at this time a year ago. Cottons are coarser and stronger at both zero and 1/8-inch gage strength tests. Yarns spun from these samples show slightly stronger yarn skein strength than a year ago. Yarn appearance grades were lower. Yarn imperfections are higher. The spinning potential yarn number is lower than last year.

Medium staple samples tested from the Southwest show fiber strength to be weaker at both zero and 1/8-inch gage tests. Picker and card waste is lower than last season. Yarns spun from these samples show higher appearance grades. There are slightly more yarn imperfections than a year ago.

These reports are published bi-weekly during the harvesting season and will be summarized in a comprehensive report at the end of the crop year. A detailed description of the tests shown in this report may be found in the summary report for the previous season. These reports are available on request from the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, 4841 Summer Avenue, Memphis, TN 38122.

Summary of Cotton Fiber and Processing Test Results, Crop of 1974, USDA, AMS, Cotton Division, May 1975.

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Averages of fiber and processing tests from selected gin points in the United States through October 17, 1975 $$\perp J$ Table 1. -- Cotton:

	Staple group			Short Staple: Southwest 1974 1975	Medium Staple: Southeast 1974 1975	South Central 1974 1975	Southwest 1974 1975		Significant dif- ference 2/
	Lots	tested	No.	0/0	r 1	e9	27 21		
	Fibrograph	2.5% span	Inches		1.08	1.07	1.07		0.02
Fiber		50/2.5 unif.	Pct.	† 1	9†	7 ¹ 7	44		a
er test	Mike	ines.	Rdg.	0.7.	9.4	4.4	44.3		0.2
results	Fiber	Zero gage	Mpsi	88	86 81	883	84 81		α
	strength	1/8" gage	G/tex	21 23	[†] 22	23 24	83 83		п
		S A nonlint	Pet.	8. 8. 2.4.	ู่ เรล	a a & o.	0,0 0,0		0.5
		P&C waste	Pct.	5.7	₩. 0.0	4.9	7.4		0.5
Processing	Yar	Skein str.	Lbs. 22s	90	98 104	95	102 103		4 (22s)
ng test	Yarn quality	ppear- ance	Index Carded	104	103	110 102	91) 5
test results	cy.	Imperf- ections	No. Yarn	17	20	16	19		2
	Gnin	Potent.	Yarn No.	41 48	61	58 54	58		е

Based on a limited number of samples of modal quality Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples. - 4 -

Averages of fiber and processing tests from selected gin points in the United States through October 17, 1975 1/ (Continued)

Table 1. -- Cotton:

2.00 m	Staple group, Area, and Lots Crop year	No	Long Staple:	South Central 1974 1975			Significant	Difference 2/
	Ω	-In-	1.16	1.17				0.02
Fibe	Length pan Un		16 46 15 45	17 46 15 43				2000
Fiber Test	h Unif Mi	Pct. Rc	6 4.2 5 4.1	6 4.7 3 4.1				
	υ	Rdg. Mp	2 81 1 83	7 90				0.2 2
Results	Strength Zero 1/8" gage gage	Mpsi G/tx	1 21 3 24	23 25 25				7
	SA Non- lint	Pct.	9.0	8 8 1.00				0.5
	P&C Waste	Pct.	8.4	8.1				0.5
-	Comber Waste	Pct.	17.9	19.7 17.7				0.5
Proc	Strength	Lbs. I	103	100			17	4(22s) 2
essing	Ya gth combed	Lbs. s Carde	121	123 133			(200)	2(50s)
Processing Test Resul	Yarn Quality Appearand carded com	Indx	110	100				5
Results	Quality Appearance	Lbs. Indx Indx Carded & Combed Yarn	110	120 130				5
	Imprfetns card comb	Q Q	17	18				a
			11 8	0 0				2
	SPY	No.	61	63				m

Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples. Based on a limited number of samples of modal quality नोल

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1975

	Spin.	tial	8		43	43	84
	i		ଥା		0/	12	10
arns	Imprfect'ns	8s or 74 tx	위		174	19	16
Carded 1	rance	22sor 27 tx	위		120	110	120
Processing Test Results - Carded Yarns	Appearance Index	8s or 22sor 8s or 22s or 8s or 22sor 8s or 22sor 74 tx 27 tx 74 tx 27 tx 74 tx 27 tx 74 tx 27 tx	윙		130	120	130
est Resi	ation	22s or 27 tx	Pet		7.5 6.4	6.5 5.4	6.8 5.6
ssing T	Elongation	8s or 74 tx	Pet		7.5	6.5	6.8
Proce	ngth	22s or 27 tx	Lbs		102	104	108
	Strength	Waste 8s or 74 tx	Lbs		100 PERCENT 6.4 326	99 PERCENT 5.6 327	100 PERCENT 5.1 344
	Color Raw Stock P & C	Waste	Pct		100 F	99 PI	100 PE 5.1
	Color w Stoc	Yel	ଥା		#	4	4
	Raw	Gra	위		α	Н	α
	S.A.		Pct		3.3	3.4	1.X571 2.6
lts	Elon-	1/8"	Pc t		LANKART 611 6.1 3.	LANKART I	LANKART 1
Fiber Test Results	Fiber Strength	1/8" Gage	G/tex		23	5γ	1 72
Fiber	Fi	Zero	Mpsi		87	102	89
	Mike		Rdg		4.2	ተ . ተ	7.4
	Digital Fibrograph	Unif	Pet		48	44	24
	Dig Fibro	2.5% span	티		.95	.98	32 1.03
1,		-Stple	32s		31	31	32
n Area	umber	Code			42	31	41
Production Area, Classification	& Sample Number	No Grade Name & Code		SOUTHWEST CENTRAL TEXAS	BRANDON 1 SIM LT SP	COMMERCE 1 MID	WACO 2 SIM

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Table 3 -- Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1975

	ı		1						- 6	, -						
		Poten- tial	윙		61		69	53	50	50	25		64		91	
•	Imprfect'ns	22s or 50s or 27 tx 12 tx	N _O		15		13	17	18	16	15		19		8	
Carded Yarns	Imp	٠.	1		21		17	18	24	18	17		52		29	
Carded	Appearance Index	r 50s			09		09	09	09	70	209		09		9	
sults -	Appe	r 22s	1		100		110	96	110	90	110		99		8	
Test Results -	Elongation	r 50s	1		٥٠٠		4.6	3.4	3.8	3.8	3.4		3.5		η·η	
Processing	Elon	22s 27 t	띪		5.5		6.3	4.8	5.3	5.3	44		5.4		5.3	
Proc	Strength	50s or	rps		37		39	30	30	33	31		53		64	
	Stre	22s or 27 tx	Ibs		90 PERCENT 4.0 104		RCENT 111	RCENT 96	RCENT 94	RCENT 97	RCENT 99 95		RCENT 99		RCENT 132	
	P & C	Waste	Pct		20° 4		100 PERCENT 4.5 11	100 PERCENT 4.8	100 PERCENT 4.6 9	100 PERCENT 5.1 9	100 PERCENT 5.7 99		100 PERCENT 7.4 99		100 PERCENT 3.7 13	
	Color Raw Stock	Yel	읾		Μ		8	∞	8	8	mm		m		8	
	Co	Gra	위		a		Q	Т	cu Co	cu Co	તા તા		CV		1	
	S.A.	Non- Lint	Pet		201		DELTAPINE 16 6.6 2.4	#4	STONEVILLE 213 6.2 1.9	STONEVILLE 213 5.9 4.0	ILLE 7A 3.6 3.2		sP37 5.5		ACALA SJ-2 5.1 2.0	
Lts	Elon-	gat'n 1/8"	Pet		COKER 5.7		DELTAP 6.6	BRYCOT #4	STONEV 6.2	STONEY 5.9	STONEVILLE 4.7 4.6 3.		TAMCOT SP37		ACALA 5.1	
st Results	er øth	1/8" Gage	G/tex		22		42	2h	23	54	2½		83		59	
Fiber Test	Fiber Strengt	Zero Gage	Mpsi		81		85	91	- 8	48	38		88		101	
		Mike	Rdg		0.4		4.2	4.9	4.9	7.4	5.0		3.6		4.1	
	cal graph	Unif.	Pet		† ₁ †		7/1	91	24	145	£8 4		7,2		84	
	Digital Fibrograph		티		1.10		1.13	1.11	1.08	1.08	1.15		1.03		1.13	
a,		Stple	32s		36		36	35	35	34	36		33		36	
Production Area, Classification	& Sample Number	ade Code		N.A.	1,1	ij	1,1	1,1	14.	20	다 다 다	ST	51		31	
Product	Sample	No Grade Name & Code		SOUTHEAST SOUTH CAROLINA	MAYESVILLE 1 SIM	SOUTH CENTRAL ARKANSAS	KEISER 1 SIM	LEACHVILLE 1 SIM	LEACHVILLE 1 SLM	OSCEOLA 1 IM PLUS	VICTORIA 1 SIM 2 SIM	SOUTHWEST CENTRAL TEXAS	AQUILLA 3 LM	WEST CALIFORNIA	SHAFTER 1 MID 31	

Table ψ --Cotton, American upland long staple: Quality characteristics by production areas, crop of 1975

		Spin.	tial	No		7.1		74
	Processing Test Results - Carded Yarns	[mprfect'ns	22s or 50s or 27 tx 12 tx	8		13)	10
		Imprfe	Comber 22s or 50s or 22s or 50s or 22s or 50s or 22s or 50s or Waste 27 tx 12 tx 27 tx 12 tx 27 tx 12 tx	8		1.4 8		129
		Appearance Index	Comber 22s or 50s or 22s or 50s or 22s or 50s or Waste 27 tx 12 tx 27 tx 12 tx 27 tx 12 tx	N N		980		90
	sults -	Appe In	r 22s o 27 tx	8		120		120 130
	est Re	Elongation	50s on	Pet		4.0		44.00.5
	ssing T	Elong	22s or 27 tx	Pet		7.00		6.8
	Proce	ıgth	50sor 12 tx	Lbs		31 43		43 49
		Strength	22s or 27 tx	Lbs		RCENT 106 125		RCENT 119
		P & C and	Comber	Pet		100 PERCENT 7.7 106 *15.5 129		100 PERCENT 8.0 119 *17.7 133
		Color Raw Stock	Yel	N		m		α
		Co Raw	Gra	있		m		Ø
		S.A. Non-		Pct		COKER 310 5.4 2.9		OKER 310 5.5 3.6
	Lts	Elon-	1/8"	Pct		COKER 5.4		COKER 310 5.5 3.0
	Fiber Test Results	Fiber Strength	1/8" Gage	G/tex		54		25
	Fiber T	Stre	Mike Zero Gage	Mpsi		83		96
			Mike	Rdg		4.1		4.1
		cal raph	Unif.	Pet		45		43
		Digital Fibrograph	32s In 38s In 38s 1.15		1.15		1.15	
			Stple	32s		36		38
	on Area	lumber	le Code			Ţή		LNI 41
	Production Area, Classification	& Sample Number	Grade Name & Code		ST ROLIN	/ILLE	NTRAL	LAKE CORMORANT SIM
	Pr C2	Sa	No		SOUTHEAST NORTH CAROLINA	HARTSVILLE 1 SIM	SOUTH CENTRAL MISSISSIPPI	LAKE C

* Comber Waste and Combed Yarn Data

